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The American Fertilizer

Vol. 97 JULY 4, 1942 No. 1

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Vol. 97 JULY 4, 1942 No. 1

The Place of the Fertilizer Industry In the War Program*

By JOHN A. MILLER

President, The National Fertilizer Association

THE slogan of World War I was "Food Will Win the War." Undoubtedly, the slogan that has been adopted for the present conflict is "Production Will Win the War." Our industry has a most important place in the production line, certainly, second only to those industries producing the actual instruments of war. Not only must we assist the farmers of this country to feed our armed forces at the four corners of the earth and our people at home, but also there must be supplied enormous quantities of foodstuffs for our Allies. Recognizing the importance of food production, Secretary of Agriculture Wickard has set crop goals far in excess of any that have been attained in the past.

In the years before the emergency, the President of the Association has justifiably felt that it was incumbent upon him to cover in his address the principal activities and plans of the industry. However, this year many of the problems confronting us will, during the course of our Convention, be capably discussed by specialists.

It will suffice to say about the production goals set by Secretary Wickard that we require more fats and oils, more milk and eggs, more canned vegetables, and more oil-bearing seeds than ever before have been produced. For example, 5,000,000 acres of peanuts will be required where less than 2,000,000 acres were grown in 1941. The goals set are impossible of attainment unless the very best of farm practices are followed, and the best fertilizer for each specific crop furnished throughout the country.

*An address at the Eighteenth Annual Convention, The Homestead, Hot Springs, Virginia, June 19, 1942.

It has been estimated that fully 15 per cent of our crop production is directly the result of the use of commercial fertilizer. Were it not for fertilizers, we would have to cultivate 30,000,000 more acres in order to attain our present crop production. During the calendar year 1941, this country used more fertilizer than ever before—9,264,000 tons which is almost a million tons more than was consumed in the preceding 12 months. For the fertilizer year ending June 30, 1942, we will have produced approximately 6,300,000 tons of superphosphate (basis 16 per cent) which is again about a million tons more than for the 12 months ending June 30, 1941. Domestic production of potash has increased to such an extent that the needs of industry are fully taken care of and there is an adequate supply for use as fertilizer.

As is well known to all of you, the nitrogen situation is another story, but it can reasonably be assumed that any shortage in the nitrogen supply that may develop will not be crippling in its effect. We had a considerable shortage of top-dressing nitrogen materials in some sections of the country this past spring season.

The industry must assist the Government in every possible way to see that all available plantfood that can be produced is used most advantageously in the country's overall interest. Individual advantages must and will be cheerfully subordinated to our National needs. With greatly increased farm income and higher production goals to be striven for, it would appear that next year the consumption of fertilizers may rise to another all-time high.

We cannot overlook making some reference to Government regulations and proposals that vitally affect our industry and its operation. The Price Ceiling Regulations which have been issued are well known to all of you. In certain instances, they may seem inequitable and impossible of operation in the face of increased costs such as freights and wages, but war was ever unfair and disrupting, and unless we adjust ourselves to the emergency which confronts us we may find that further dislocation of our ordinary procedure is imperative. We are accustoming ourselves to the present situations, and it is our opinion that if unreasonable and unworkable regulations seem to have arisen, the means of ameliorating them will be found, as all those in Government with whom we deal are acquainted with our problems and we have not *yet* been asked to do the impossible.

We have had a good fertilizer year, and generally speaking have realized a fair profit. This is an admission from one manufacturer who has been variously accused by friends in other lines of endeavor of playing golf in the summertime, shooting birds in the wintertime, attending Conventions semi-annually in nice places like this and complaining all year around about bad business conditions.

The industry has been more seriously handicapped recently by the diversion of all liquid forms of ammonia from the manufacture of mixed fertilizers. The lack of such liquors makes it extremely difficult to manufacture acceptably the grades of fertilizer to which the American Farmer has become accustomed. We are, therefore, forced to ponder seriously over the problem of obtaining satisfactorily conditioned mixed fertilizers by the means at our command. Of very serious portent, too, is the suggestion that anhydrous ammonia may be diverted from sulphuric acid plants using the chamber process. To return to the potting of nitrate of soda would require a considerable tonnage of iron and in some cases will probably reduce the tonnage of acid produced.

Ration Rumors

You are all familiar with the fact that there has been a widespread and persistent rumor among farmers that fertilizers are to be rationed next season. Numerous conferences have been held in Washington on this subject. At the present time, it appears that the outlook for raw materials from which to make fertilizers, including nitrogen-bearing materials, is sufficiently encouraging to indicate that rationing to the farmer will not be necessary. Neither the Government, farmers, nor the fertilizer industry wants fertilizers to be rationed, but if a grave and unforeseen shortage in nitrogen should develop later, it may be advisable to introduce some form of rationing to insure the best use in the National economy of such nitrogen as is obtainable. Practically all of us had some experience this past spring in rationing nitrogen to a limited extent. If and when rationing does become necessary, the fertilizer industry through its thousand factories and its 50,000 agents and dealers has an organization capable and ready to carry out such procedures as may be necessary most expeditiously and with little or no expense to the Government. In conformity with the resolution passed at our last Convention pledging cooperation in the war effort, your Association has tried in every possible way to assist those Governmental agencies engaged in the many phases of war emergency work. Our Washington Office has at all times lent its aid in obtaining and furnishing available information in connection with our industry and with agriculture in general. Requests for such data are a daily occurrence and come from many sources. Every effort is made to see that complete and accurate answers are made to all inquiries so that our efforts will be of the greatest possible assistance.

Joint Meetings Arranged

At the request of the War Production Board, the Office of Price Administration, and the Office of Agricultural War Relations of the U. S. Department of Agriculture, the Association arranged and held this spring nine regional meetings throughout the country in order that the Government might have an opportunity for its representatives to present personally to the various agricultural agencies, both State and Federal, and to the fertilizer industry, the many perplexing problems that present themselves in connection with the production and distribution of plant-food. To these meetings were invited the representatives of the land grant colleges and agricultural experiment stations, the extension service, State departments of agriculture, members of the State and County war boards, county agents, and all members of the fertilizer industry. In all, over 900 people attended these meetings and heard authorized Government officials discuss such topics as the allocation of nitrate of soda, price ceilings, preference ratings on repairs, bags, agricultural crop goals, available supplies of fertilizer raw materials, and transportation. It is felt that a much better understanding wa

(Continued on page 22)

Our Association—A Brief Report*

By CHARLES J. BRAND

Executive Secretary and Treasurer, The National Fertilizer Association, Washington, D. C.

OUR Association, in its present national scope, has crossed the threshold of its 18th year. On June 11, 1925, the organizing committee, created to weld the old Southern Fertilizer Association and the old National Fertilizer Association into one truly national body, completed its work. After a full year of preparation, what is now The National Fertilizer Association adopted a carefully prepared set of by-laws, a constructive program of work, and a budget adequate for doing a great industry service. It was my good fortune on that day to be selected by the responsible officers to become the Executive Secretary and Treasurer of the organization.

That day is also the anniversary of another event that is less worthy of celebration. It was then that I made my first talk to the industry, the first of so many that have at times put you to sleep and at other times driven you to the golf links.

We began with 147 active members, but by the end of the year we had increased this to 168. We began with about the same number of associate members as we now have, namely 63.

Our lowest member roll occurred in the depression year, 1930–31, when we had 132 active members and 54 associates; a total for both of only 186.

Our highest membership occurred in the period of the NRA code when there were 525 active members and only 44 associate members, a total of 569.

Our average membership for the 17 years in the active class has been 267; in the associate class 59. Average for the total, 326.

On June 16, 1942, when this was written, we had 271 active members, which is just 124 more than we had at the start, and four more than the average; and 63 associate members, almost exactly what we had in 1925, a total of 334.

It is perhaps a fair summary to say that our membership roll has varied with the nature of our work and with the economic fluctuations affecting the industry because of its complete dependence upon agriculture.

*Address given at the annual convention of The National Fertilizer Association, Hot Springs, Virginia, June 19, 1942.

As treasurer I am pleased to report that 100 per cent of our active members have supplied their tonnage reports, and made payments on their dues. No member is at this moment in arrears. This is the first time in 17 years that we have been able to report such complete cooperation.

Some Outside Comments on Your Association's Work

On June 4, 1942, the U. S. Department of Commerce released a 324-page report which I hold in my hand. It was prepared by C. J. Judkins, chief of the Trade Association Section of the Department, and is entitled, "Trade and Professional Associations of the United States." This volume is a descriptive directory of some 3,100 national and interstate organizations.

In sending an advance copy to me Mr. Judkins said:

"Here is a complimentary copy of an unusual kind of publication—a combination directory and industrial handbook. Will appreciate your comment for yours is widely known as one of the best managed associations."

Many of you know Willard M. Kiplinger, famous for his Washington Newsletter which is read by thousands of business men. He has just published an outstanding new book, "Washington Is Like That." In the chapter on "Trade Associations," he says that there are about 150 association executives, "ambassadors of business" he calls them, in Washington. He names your Association among the first five to which he makes specific complimentary reference.

You as members of The National Fertilizer Association and our Board of Directors, which has given direction to and supervised the work of the Association, are entitled to great credit for the progressive policies that have made possible the continuous operation for the past 17 years of an organization that has won general approbation for its effort for the general welfare and particularly for the advancement of American agriculture.

Trade associations like ours are often referred to as "lobbying" agencies, and their executives as "lobbyists." I want to give you

the view of our work with the Congress that was expressed some years ago by the late Judge Thaddeus H. Caraway, then senior senator from Arkansas.

Senator Caraway was chairman of a special committee appointed to investigate lobbying activities, and I was invited to give testimony before his committee. When I had finished, the Senator said, as nearly as I can now remember his words:

"Mr. Brand, if all the agencies representing commerce and industry here in Washington conducted the kind of activities that you conduct in the way you conduct them, there would be no need for a lobbying investigation."

I have recited these instances with some natural reluctance, not in any spirit of praise for the directors or myself or the faithful members of the staff, but by way of accounting to you, the members of this Association—to give you at least some measure of outside and official assurance that those whom you have selected to represent you in doing the common work of the industry are discharging their duties in a manner consonant with the public interest and that of a genuine service-rendering industry.

Examples of Work Done and in Progress

It requires an amount of genius that I wholly lack to present an annual report that sparkles with wit and interest. In the few minutes that I have on this morning's program I can only mention in a matter-of-fact way some of our Association's work that has somewhat wide application and general interest.

First, our oldest, continuous publication, *The Weekly Wholesale Price Index*. It was the first weekly price index published in the United States—antedating even that of Prof. Irving Fisher of Yale. Believe it or not, for 17 years, or at least since September, 1925, this index has been released every week without a single break or tardiness. The constant research involved in preparing the index is the source of protective information on price relationships which has been of the greatest value. It is used regularly by approximately 100 newspapers. Most faithful in its use has been that dean of financial journals, *The Commercial and Financial Chronicle*, which has published the index release in full every week during the many years since 1925. show you a sample of the manner in which the *Chronicle* publishes the index.)

Two regular publications must be mentioned because of their importance: (1) *The N. F. A. News* of which No. 785 was mailed to your offices yesterday from Washington, and (2) *The Fertilizer Review* which has now been published nearly 17 years. The *News* affords us constant weekly contact with our members, and the *Review* reaches a wide industrial, commercial, economic, and agricultural audience approximately 30,000.

Earlier I mentioned "lobbying" and "lobbyists." Every worthwhile trade association executive is a trade expert, and every one of them resents these terms when applied to him. Buttonholing and gumshoeing are not resorted to by capable executives, and do not contribute to getting important jobs done efficiently. Kiplinger goes so far as to say that the 150 association executives in Washington "are probably the best informed small group in the capital." Here is an illustration of our usual procedure in presenting the industry's case.

Not so long ago Senator Pope, now on the Tennessee Valley Authority, was chairman of a special joint committee of the Congress to investigate the phosphate resources of the United States. Hearings were held at several strategic points including Pocatello, Idaho; Knoxville, Tennessee; and Lakeland, Florida. I was invited to appear at the hearing at Lakeland. I hold in my hand an extract from the stenographic report containing more than 100 printed pages of the testimony given in behalf of the industry.

In addition to our wholesale price index work which has received thousands of commendations and the widest imaginable use, we carry on many other statistical and economic activities.

Every year we have collected and published the only *statistics of fertilizer consumption*. These furnish the sole basis of all discussion of fertilizer consumption including plans for possible rationing. The figures for 1941 were issued less than 30 days ago and showed a consumption of 9,264,000 tons.

Four times since 1925 we have made and published *surveys of plantfood consumption* in the United States that have been of great use to the industry and to agriculture, in both State and Federal spheres, in planning their activities and developing their attitudes toward commercial plantfood. These surveys are part of our long educational program to increase the plantfood content of fertilizers and to eliminate unnecessary grades. If the 1925 concentration had prevailed in 1941, 11,000,000 tons of all kinds of fertilizers would have been required instead of the 9,264,000 tons which were actually shipped. We hope

and believe that our work has played a part in this result.

Special studies like "Fertilizer Prices and Price Indexes," "Farm Income and Fertilizer Consumption," "Are Fertilizer Prices Rigid?" are prepared and issued from time to time.

In February we published *Fertilizer Consumption by Counties*, based on the Sixteenth Census of the United States: 1940." We have had hundreds of requests for this publication, particularly from State and Federal agricultural workers responsible for various aspects of the war production program. On its face this seems like a simple though highly useful task. Behind it, however, lies the whole story of persuading the census authorities to include such questions in the census enumerator's questionnaire as would provide the information upon which the publication was based.

Our first and second *consumer surveys* have been of endless utility in both peace and war. They were made ten years apart. In the first one nearly 50,000 farmers were personally interviewed by representatives of our member firms, and in the second one about 32,000 farmers were similarly interviewed. Data published in "American Fertilizer Practices" are the most comprehensive and reliable of their kind available anywhere.

We have also had an opportunity to serve in the field of stimulation of useful research. I need only call your attention to the proceedings of the annual meetings of the *National Joint Committee on Fertilizer Application*. The seventeenth volume will appear shortly. No informed person would think of questioning the tremendous value of the work that has been done in the field of fertilizer application for which the Association has provided leadership and assistance through these many years. Mere mention of the words "fertilizer placement" will create a concept of usefulness in your minds.

The *charts* on display here in the convention hall represent only the economic type of illustrative material of which we prepare a goodly volume. They are used to illustrate articles in the farm, trade, and technical press and in the commercial journals.

We issue other charts that have proven of wide, educational use. These are our *agronomic charts* used in the teaching of sound agriculture including the use of fertilizer. Five series of these charts have been prepared in the course of the years and literally thousands of them are in constant use by county agents, vocational agriculture teachers, and others.

In the field of agronomic education I shall mention only four relatively recent *bulletins*, namely, "Fertilizer and Good Farming" of which approximately 250,000 copies were distributed; "Mineral Hunger in Livestock"; "Green Acres" which is a companion text for our all-color moving picture of the same name; and "Putting Plantfood to Work," a practical treatise on fertilizer use. During the past 12 months we have distributed no less than 738,000 publications in response to more than 2,500 requests. During recent weeks, more than 1,600 requests have been received for four of our new bulletins.

We have continued the distribution of our two full-color *motion pictures*, "Green Acres" and "Putting Plantfood to Work." These have now been shown to more than 6,000 audiences numbering more than 450,000 persons. We are just completing a new motion picture, "The Life of the Soil."

We have completed the publication of "Hunger Signs in Crops" in an edition of 14,000 copies. More than 10,000 copies have been sold to members, agricultural workers, farmers, and others. About 800 copies were distributed free to the authors, to publications for reviewing, to distinguished persons connected with agriculture, and to each of our member companies. Less than 3,000 copies are now on hand, and during recent months they have been moving at the rate of between 40 and 50 copies a week. As this was being written, an order for nine copies came in from the U. S. Department of Agriculture library.

We have held 18 *conferences* with agricultural officials and research and extension workers, and attended more than 30 important agricultural meetings, staff members making addresses at many of them.

President Miller in his address has touched upon some phases of the war emergency work that is constantly going on. I illustrate its volume by showing you a file containing a single copy of each of the important documents relating to war activity that have been supplied to you in recent months.

Yesterday we mailed you from Washington "War Emergency Notes No. 7." This gives among other things reports on the meetings of the Fertilizer Industry Advisory, Nitrogen, and other committees, as well as industry and agronomy meetings.

Formerly we conducted educational work in *cost accounting*, in accordance with the pattern long approved by Government agencies including the Federal Trade Commission. In recent years staff limitations have necessitated dropping this work. Within a few days

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The Fertilizer Industry—Government Hitchup*

By T. E. MILLIMAN

Chief, Agricultural Chemicals Unit, War Production Board

THIS morning we are met in a place recently vacated by the Japs. The situation is prophetic. We may expect Americans, if not fertilizer men then tourists and businessmen, to be meeting at all of the many far-flung places presently held by the Japs, who will yield or be annihilated by a civilization founded on justice among men and as between nations, and bulwarked by greater power of production than any nation has known or can possess.

The fertilizer industry is at war. Its functions have changed to fit the exigencies of war. For a generation I have known the fertilizer industry to be one seeking to sell its goods to all who would buy without particular regard to area, use or need. It has been in large part a "please the customer" industry along the sound traditional lines of all American business. Many critics have pointed out the failure of the fertilizer industry to follow the recommendations of State and Federal agronomists as to fertilizer ratios and grades or analyses. I know that the fertilizer industry has tried to do a job that would fit the farmers' needs better than the farmer himself has demanded, and some progress has been made, yet mainly the policy has been that "the customer is always right."

Comes now a demand for a vastly increased production of foods and fibres to feed, clothe and equip our armed forces here and abroad, our civilian population and, to an increasing extent, the peoples of the United Nations. Business as usual in the fertilizer industry is beyond the realm of realization. Adjustments to fit the changed needs of a war-time agriculture must come. No great changes have yet been needed, yet enough have already occurred to condition the industry to those which must come and to show clearly to the farmers and to the government that the industry is capable of readjusting itself to a war plane.

Two great opportunities are presented the industry under the guise of war-time necessity. To my mind both are undisguised opportunities more than they are necessities, which the industry has long been waiting for and which without the intervention of war, might not have come for a decade or more. The first and greatest opportunity facing 750 fertilizer manufacturers is to gear the industry to the farmer by re-educating the local dealer or agent. Heretofore the local dealer has been regarded as the customer when, in fact, he is not the customer at all. Nevertheless, for more than twenty years the local dealer has been catered to, his whims accepted, his ideas recognized regardless of their agreement or lack of it with State fertilizer recommendations, and generally a wild scramble has been conducted by the industry for this local man's favor and patronage. He has many times imposed upon the source of supply by demanding cash terms when actually he received credit, and altogether he has been the pampered child and bottleneck, not only of the industry but also of the Land Grant Colleges and the extension forces of the U. S. Department of Agriculture. He, in turn, has taken the course of least resistance in respect to ratios, grades and kinds of fertilizer and has distributed plantfoods on the basis of riding with the demand that long years of custom created.

Among local dealers there are, however, many shining examples of men who have had a more favorable effect upon the fertilizer practices of the farmers they serve than all other influences. Indeed it is true that the local dealer has always had more influence than all other combined factors, whether he was riding on the influences of the past or crusading to bring about improvements in line with his State and regional recommendations.

Like the industry from which he obtains merchandise, the local fertilizer dealer is, in effect, a servant of the farmer, be he country merchant, large feed dealer, warehouse man

*An address given at the annual convention of The National Fertilizer Association, Hot Springs, Virginia, June 19, 1942.

or a farmer himself. I am confident that almost all of the 52,000 local fertilizer dealers are now ready under the impetus of war and with the fear of loss of business to nearby competitors removed, to at least wholeheartedly team up with the sources of supply on the one hand and with public agricultural authorities on the other. Since the local dealer's say-so is the greatest single influence upon the grade of fertilizer a farmer will use, barring the farmer's own judgment or prejudice, the local dealer should be the best informed authority on the fertilizer crop needs of his community. A respectable minority are already recognized as the best informed local authorities.

Since the fertilizer mixer no longer finds it necessary to court the dealer and is experiencing the unusual, if not delirious, sensation of being courted by him, a splendid opportunity presents itself to utilize local dealers as the greatest force in applying the right fertilizers to designated crops; also to feed through the local dealer to the farmer official recommendations as to amounts per acre, methods of application, etc. Since undoubtedly a majority of local dealers are substantial citizens and responsible factors in community life, and are withal possessed of better than average intelligence, the program for making fertilizer do the most work on the largest possible number of acres will appeal to them as it does to all patriotic citizens. Country dealers and agents are, therefore, ripe for leadership. They will respond as they never have before to the suggestions and recommendations of their sources of supply. Let these recommendations of the industry be those arrived at openly by conferences between industry, U. S. Government and State authorities.

Ways to Meet Nitrogen Shortage

There is a shortage of chemical nitrogen. The supplies of superphosphate and potash have been adequate to meet all needs. The prospect for these two materials for the coming fertilizer year is favorable. Moreover, the shortage of total nitrogen is not as great as it seems, a situation which is due to the almost certain existence of a greater surplus of cotton seed, soy bean and peanut meals over feeding requirements than has ever existed. The feed trade estimates that this prospective surplus will be considerably greater than the last reported figures of the Government. We may then reasonably count upon partial alleviation of the nitrogen shortage by more liberal use of seed meals as fertilizers along with the customary by-product fertilizer organics, such as nitrogenous tankage, castor meal, dried ground tobacco stems, garbage tankage and processed sewage. Ways must be found to incorporate seed meals and other organics into fertilizers to the extent that the farmer is willing to buy them when so incorporated, without removing the opportunity from the farmer to buy fertilizers of lower nitrogen content minus the addition of unusual amounts of organic material. As a corollary it should be stated that farmers should be encouraged to use seed meals for direct application or mixing whenever they prefer to do so at a lesser cost than to buy them already incorporated with other plant foods. Let the farmer have the choice of any of these means of using additional organics.

The shortage of chemical nitrogen for the next fertilizer year is unknown. Sulphate of ammonia will be in plentiful supply, with driblets of cyanamid. The variable factor is nitrate of soda, the future supply of which cannot be measured with assurance at this time. The total supply of chemical nitrogen expected to be made available to the fertilizer industry will if and when combined with the usual organics and the excess supplies of seed meals, result in what is now considered to be a comparatively mild shortage. Remember, if you will, that in the fiscal year now closing more chemical nitrogen has been made available for fertilizer use than in any other year in the history of fertilizer. Readjustments of ratios and grades, and economy in the use of nitrogen materials for direct-application, are considered sufficient to carry the American farmer through to the largest crop production in history for 1943.

At the present time Government and the fertilizer industry working together are conducting a series of meetings throughout the several regions, first with State agronomists and then with the fertilizer industry, to arrive at a revaluation of the use of complete fertilizer under a moderately restricted nitrogen supply. Already meetings have been held with the agronomists of seven Middle Atlantic States and with those of eight Middle Western States. These two regions were chosen first because they are the areas in which fall-sown wheat is fertilized. The Government was present at these meetings through representatives of the USDA, OPA and WPB. The industry was represented by personnel of The National Fertilizer Association, the latter organization calling the meetings. At both meetings the agronomists, in recognition of the limited use of nitrogen on wheat and allowing for the enormous reserves of wheat stocks now on hand as the 1942 crop

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Fertilizer Industry—Farm Group Conferences

Middle Atlantic Meeting

The fertilizer industry-farm group conference, which was held in Philadelphia on June 24th, was attended by more than 100 persons, including agronomists and members of the USDA War Boards of all seven States (New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, West Virginia). The Federal agencies were represented by P. H. Groggins, chief, Chemicals Division, OAWR; T. E. Milliman, chief, and Dale Kieffer, consultant, Agricultural Chemicals Unit, WPB; F. W. Parker, consultant, Fertilizers and Insecticides Division, OPA; and W. F. Watkins, Bureau of Agricultural Economics, USDA. More than 80 representatives of the industry attended. The meeting was called to order by T. E. Milliman who presided during the forenoon session. He reviewed the fertilizer supply situation, pointing out that the War Production Board does not consider it necessary to allocate either potash or superphosphate, and as long as supplies of these two materials move to fertilizer plants satisfactorily, the War Production Board will not intervene. As to nitrogen, Mr. Milliman stated that we shall have about as much sulphate of ammonia as last year, and this is, of course, the main source of nitrogen in mixed fertilizer. Nitrogen solutions are all being used for war purposes, and cyanamid and synthetic nitrate of soda are no longer available except in small quantities. It is possible that as much nitrate of soda may be imported as last year, but the larger percentage will have to be used in the Gulf States. All chemical nitrogen materials are now subject to allocation by WPB, he said, and in view of the shortages it will be absolutely necessary to adjust the nitrogen content of mixed fertilizer downward.

W. F. Watkins spoke on "Crop Goals and Nitrogen Needs." He pointed out that emphasis must be placed on the production of those food, feed, and fiber crops that are most needed for the war program. In allocating nitrogen supplies, soil differences will have to be recognized. He stated that estimates as to the nitrogen and fertilizer requirements of crops are being prepared by States, using information from all available sources but particularly from Association surveys and data supplied by the agronomists of the various States. He pointed out that in allocating nitrogen supplies a balance must be main-

(Continued on page 20)

May Sulphate of Ammonia Production

According to the figures issued by the U. S. Bureau of Mines the production of by-product sulphate of ammonia during May amounted to 66,874 tons, an increase of almost 5 per cent over April production. During the first five months of 1942 production totalled 320,002 tons, an increase of about 4 per cent over the same period in 1941.

Due, no doubt, to the tapering off of the spring fertilizer season, shipments dropped from 70,153 tons during April to 61,488 tons during May. These decreased shipments are reflected in the stocks on hand at the end of the month, 13,878 tons on May 31st, an increase of more than 5,000 tons over the April 30th figure.

	SULPHATE OF AMONIA TONS	AMONIA LIQUOR TONS NH_3
Production:		
May, 1942	66,874	2,814
April, 1942	63,766	2,820
May, 1941	61,480	2,655
January-May, 1942	320,002	14,031
January-May, 1941	306,888	12,894
Shipments:		
May, 1942	61,488	2,539
April, 1942	70,153	3,146
May, 1941	54,725	2,486
Stocks on Hand:		
May 31, 1942	13,878	782
April 30, 1942	8,792	662
May 31, 1941	27,787	774
April 30, 1941	21,374	834

Margeson and Farley Elected Vice-Presidents of I. M. C.

J. P. Margeson, Jr. and Franklin Farley were elected Vice-Presidents of International Minerals and Chemical Corporation according to an announcement by Louis Ware, President, after a regular meeting of the Board of Directors in New York on June 25th.

Mr. Margeson has been with International for about two and one-half years. He has been successively Assistant to the President and General Manager of the corporation's Magnesium Division which is developing a metallic magnesium project with plants in New Mexico and Texas. As of July 1st Mr. Margeson has been also appointed General Manager of International's Potash Division with mining operations in Carlsbad, New Mexico, and sales offices in the principal cities of the country.

Mr. Farley has been General Manager of the Phosphate Division of International since early in 1941. For eighteen years previously, he had been Treasurer of The Phosphate Mining Company in New York, in charge of general administrative and sales activities.

John T. Burrows has resigned as Vice-President of International Minerals and Chemical Corporation and will devote his entire time to the executive direction of the Phosphate Recovery Corporation, a subsidiary owned jointly by International Minerals and Chemical Corporation and Minerals Separation North American Corporation.

AAA Superphosphate Prices Increased

On July 2nd Price Administrator Leon Henderson announced that the maximum prices which manufacturers may charge the Agricultural Adjustment Agency for superphosphate on contracts previously made are to be raised to the same levels as those paid by other consumers. This change becomes effective on July 4th.

A majority of the AAA superphosphate purchases were made on a yearly contract basis in June, 1941, with additional purchases at approximately the same price levels during September and December, 1941. Since that time superphosphate manufacturers have had cost increases due to circumstances beyond their control. Sulphuric acid has been in short supply and phosphate rock must now be shipped from the Florida fields by rail instead of boat.

The consumers' ceiling prices on superphosphate, established on regulation No. 135, top those of the current spring season in effect between February 16th and 20, 1942. These same ceiling prices can now apply on superphosphate shipped to AAA.

Brewer Appointed to Iodine Educational Bureau

As a result of the resignation of J. J. Nichols as Vice-President and Director of the Iodine Educational Bureau, Inc., Herbert C. Brewer, for many years Vice-President and Director of the Chilean Nitrate Educational Bureau, Inc., has been appointed also a Vice-President and Director of the Iodine Educational Bureau, Inc. Eugenio Vidal likewise has been appointed a Vice-President of the Iodine Educational Bureau, Inc.

Oscar W. Tuckwood, Traffic Manager for the past seven years, has been named a Vice-President of the Chilean Nitrate Sales Corporation.

The N. F. A. Golf Tournament

In conducting a program of 20 events during the three days of the National Fertilizer Association Convention at Hot Springs, the Golf Committee furnished the most popular feature of the entertainment program. Every event was well patronized and competition was keen for the prizes which had been donated by 16 companies and the National Fertilizer Association.

The 1942 Golf Committee was composed of A. L. Walker, Jr., Chairman; A. B. Baker, Walter Crady, E. H. Jones, H. H. Kemp, Western Logan, A. N. Myers, F. J. Woods.

The winners of the various events were as follows:

THURSDAY, JUNE 18th
Medal Play Handicap

Winner—J. P. Brinton, Jr., Hydrocarbon Products Corporation, New York City.

Runner-up—Pierce Vandercook, Armour Fertilizer Works, Chicago Heights, Ill.

Match Play vs. Par

Winner—H. A. C. Rauchfuss, Woodward & Dickerson, Philadelphia, Pa.

Runner-up—J. T. Burrows, International Minerals and Chemical Corp., Chicago, Ill.

Tombstone Handicap

Winner—M. W. Whipple, Olds & Whipple Company, Hartford, Conn.

Runner-up—John A. Miller, Price Chemical Company, Louisville, Ky.

Kickers' Handicap

Winner—J. S. Whittington, F. W. Berk & Company, New York City.

Runner-up—F. J. Woods, The Gulf Fertilizer Company, Tampa, Fla.

Low Gross

Winner—Weller Noble, Pacific Guano Company, Berkeley, Calif.

Runner-up—E. K. Ludington, Jr., Chase Bag Company, New York City.

Veterans' Match Play vs. Par

Winner—H. C. Moore, Armour Fertilizer Works, Atlanta, Ga.

Runner-up—E. H. Jones, Apothecaries Hall Company, Waterbury, Conn.

FRIDAY, JUNE 19th
Medal Play Handicap

Winner (Gold Cup)—J. W. Rutland, International Minerals and Chemical Corporation, Chicago, Ill.

Runner-up—A. B. Baker, Bradley & Baker, New York City.

Match Play vs. Par

Winner—T. V. Hough, Kershaw Oil Mill, Kershaw, S. C.

Runner-up—B. A. Crady, U. S. Potash Company, New York City.

Tombstone Handicap

Winner—A. N. Myers, Chilean Nitrate Sales Corporation, New York City.

Runner-up—George D. Morgan, Morgan Brothers, Richmond, Va.

Kickers' Handicap

Winner—T. E. Bradley, Potash Company of America, Peoria, Ill.

Runner-up—Paul M. Seaman, Jr., Raymond Bag Company, Middletown, Ohio.

Low Gross

Winner—J. E. Barnes, U. S. Potash Company, Atlanta, Ga.

Runner-up—J. C. Fulton, Southern Phosphate Company, New York City.

Veterans' Medal Play Handicap

Winner—L. E. Britton, Consolidated Rendering Company, Boston, Mass.

Runner-up—George W. Gage, Anderson Fertilizer Company, Anderson, S. C.

(Continued on page 18)

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FERTILIZER MATERIALS MARKET

BALTIMORE

Allocation of Sulphate of Ammonia Announced for Coming Season. No Change in Potash and Superphosphate Prices.

Exclusive Correspondence to "The American Fertilizer"

BALTIMORE, June 30, 1942.

The outstanding feature in connection with the fertilizer industry has been the announcement by the Government to the effect that sulphate of ammonia will be rationed and allocated during the coming season. In all likelihood, the Government will probably prohibit the use of nitrogen in grain mixtures for the fall season in order to conserve supplies of nitrogen for munition purposes.

Ammoniates.—According to recent OPA ruling, producers have been instructed to discontinue charging 10 cents per unit of B. P. L. in tankage for feeding purposes, and wet rendered tankage is accordingly quoted at about $6.00 per unit of nitrogen, f. o. b. producing points, which, of course, makes it entirely prohibitive for use in fertilizer mixtures.

Nitrogenous Material.—Due to the strong position of the tankage market and curtailed production of nitrogenous, offerings of the latter are very limited, and the market is nominally about $4.00 per unit of nitrogen, f. o. b. basis Baltimore.

Sulphate of Ammonia.—Producers are again booking business on the same basis as last, but deliveries will be rationed and allocated by OPA in order to conserve nitrogen for munition purposes and will be permitted for use in fertilizer only for essential crops.

Nitrate of Soda.—It is anticipated that the present schedule will continue throughout the month of July at $33.00 per ton in 100-pound bags, with usual differential for 200-pound bags and in bulk, and deliveries will continue to be allocated by OPA as heretofore.

Fish Meal.—There have been reports of further sales at $66.50 per ton for scrap guaranteed 60 per cent, f. o. b. Chesapeake Bay fish factories, for shipment "if and when made." On account of war restrictions of fishing territory, there may be a curtailment in catch this year, but ceiling prices have been fixed on both scrap as well as meal.

Superphosphate.—There is no change in the situation and producers continue to quote ceiling price of $9.60 per ton of 2,000 pounds, basis 16 per cent for run-of-pile, and $10.10 for flat 16 per cent grade, both in bulk, f. o. b. producers' works Baltimore. No heavy stocks are accumulating, due to heavy demand for sulphuric acid for munition purposes, and as producers work off their stock piles of rock the question of raw material, which is now all moving by rail, may be an important factor before next spring season.

Bone Meal.—The market remains quiet and there is practically no raw or steamed bone meal offering at the present time.

Potash.—Domestic producers have now announced new schedule of prices which are practically the same as last year, but are booking orders cautiously only for buyers' legitimate requirements. If no strikes interfere it is anticipated there will be sufficient tonnage to take care of legitimate domestic requirements.

Bags.—No change in the situation, and the market on burlap continues high and uncertain on account of shipping hazards from India. In view of this situation, practically no new business is being booked for burlap bags. Although some manufacturers will doubtless use cotton bags, a majority of the tonnage will probably move in paper bags.

CHARLESTON

Price of Sulphate of Ammonia and Quantity Awaited. Cottonseed Meal Prices Advance.

Exclusive Correspondence to "The American Fertilizer"

CHARLESTON, June 29, 1942.

Buyers are eagerly awaiting information not only as to the price of sulphate of ammonia, but as to the quantity that will be available.

Nitrogenous.—Sellers of this material are still staying out of the market, being closely sold up for June and July.

Blood.—The price of this continues impossible for fertilizer manufacturers and is only being bought by the feed mixers. Chicago market is $5.70 per unit of ammonia ($6.93 per unit N).

Fish Meal.—Ground fish meal continues at $72.50 per ton, f. o. b. Chesapeake Bay, with few sales.

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LET US QUOTE YOU ON YOUR REQUIREMENTS OF THESE MATERIALS

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SUPERPHOSPHATE

✣

DOUBLE SUPERPHOSPHATE

✣

NITRATE *of* SODA

✣

SULPHURIC ACID

✣

SULPHATE *of* AMMONIA

✣

BONE MEALS

✣

POTASH SALTS

✣

DRIED BLOOD

✣

TANKAGES

✣

COTTONSEED MEAL

✣

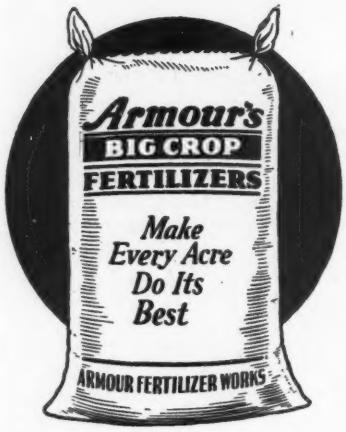
BONE BLACK

✣

PIGMENT BLACK

✣

SODIUM FLUOSILICATE



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Birmingham, Ala.
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Cincinnati, Ohio
Columbia, S. C.
Columbus, Ga.
East St. Louis, Ill.
Greensboro, N. C.
Havana, Cuba
Houston, Texas
Jacksonville, Fla.
Montgomery, Ala.
Nashville, Tenn.
New Orleans, La.
New York, N. Y.
Norfolk, Va.
Presque Isle, Me.
San Juan, P. R.
Sandusky, Ohio
Wilmington, N. C.

Cottonseed Meal.—This material has stiffened considerably. Price for the 8 per cent grade is $35.50, Memphis; $38.00, Atlanta.

CHICAGO

Light Offerings of Fertilizer Organics. Ceiling on Prices Uncertain. Feed Supplies Scarce.

Exclusive Correspondence to "The American Fertilizer"

CHICAGO, June 29, 1942.

Trading in organics moves at a slow pace, owing to light offerings put out by sellers. Whether ceiling prices will be placed on organics is still in doubt. Some of the trade, usually well informed, maintain that a ceiling will be placed, while others, also well posted, are of a contrary opinion.

Consuming demand for feed has been greater than the supply, and therefore all offerings of material readily find a home at ceiling prices as to zone. The scarcity of supplies continues.

Nominal prices are as follows: High grade ground fertilizer tankage, $4.00 to $4.25 and 10 cents ($4.86 to $5.16½ per unit N); standard grades crushed feeding tankage (ceiling), $5.37 per unit ammonia ($6.52½ per unit N), (no charge for B. P. L.); blood, $5.65 to $5.75 ($6.87 to $6.99 per unit N); dry rendered tankage (ceiling), $1.21 per unit of protein, Chicago basis.

TENNESSEE PHOSPHATE

Shipments of Rock Break All Records. Railroad Gives Good Service but Increased Rates Protested.

Exclusive Correspondence to "The American Fertilizer"

COLUMBIA, TENN., June 30, 1942.

Shipments of phosphate rock from the Tennessee field into all consuming channels have been greater for the first half of 1942 than in any similar period since the Tennessee production started in 1896. While definite figures are not yet obtainable, the total consumption at electric furnace plants at Columbia, Mt. Pleasant and Muscle Shoals, together with shipments to other parts of the country have averaged well above 100,000 tons per month.

The excellent service furnished this field by its only railroad is evidenced by the fact that only for one period of about a week or ten days, during the heaviest of the initial movement of wheat and other grain, has there been any shortage of cars. The very bad condition into which all railroad cars have gotten in the past decade, is evidenced by the large number of complaints of bad conditions in which many shipments of ground rock in bags reach destinations.

Effective June 12, 1942, it was decided by the committee in charge of application of Ex Parte ruling No. 138 of the I. C. C. that, while the increase of 3 per cent would stand on all freight rates on phosphate rock in bulk, the rates on phosphate rock in bags would be increased 6 per cent. Just what brand of reasoning or logic could possibly motivate any such decision, except hearty determination to prevent any use of ground rock by farmers as far as possible, cannot be fathomed. The farmer pays the extra cost of bagging in order to save waste and facilitate handling and over ninety per cent of the phosphate rock to farmers is shipped in bags, while practically none is so shipped to fertilizer manufacturers. The feeble excuse is made that shipments of fertilizer had the rates advanced 6 per cent on both bags and bulk, but it is well known that in all areas close to the fertilizer producer, the rates on fertilizer are very much lower than on phosphate rock. Only on long distance shipments beyond the producing center are rock rates the cheaper. For instance the rate on phosphate rock from this field to Franklin, Ky., is $2.76 in bags and

Manufacturers' Sales Agents for **DOMESTIC**

Sulphate of Ammonia

Ammonia Liquor :: Anhydrous Ammonia

HYDROCARBON PRODUCTS CO., INC.

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$2.66 in bulk. Superphosphate or commercial fertilizer from here to Franklin, Ky., is $1.42.

It is hoped that organized agriculture will be able to so stimulate farmers generally to protest against this senseless discrimination as to stop it by proper action of the I. C. C., through the Congressmen interested in the welfare of their constituents.

C. G. Atwater Retires

The Barrett Division, Allied Chemical and Dye Corporation, announces with regret the retirement of C. G. Atwater, effective as of July 1st.

Mr. Atwater has been associated with the fertilizer industry, through The Barrett Division and predecessor companies, for nearly half a century. In his earlier years he was engineer in charge of design and construction for the first by-product coke ovens in the United States operated for blast furnaces, this being the third by-product installation in this Country. Later he gave careful study to the problem of effective use of sulphate of ammonia recovered by these ovens as a by-product, and maintained his keen interest in the use of the nitrogen so recovered through to the present time. His most recent contribution to the service of the industry in which he spent so much of his life was in the preparation of the interpretative film, "Plant Food from Coal," recently released for circulation by the Educational and Research Bureau for By-Product Ammonia. In 1918 Mr. Atwater served in the U. S. Navy Ordnance Department under Admiral Earle, as an ammonia expert on the synthetic ammonia process; and beginning about 1929 he had a leading part in the introduction to farm consumers of the then new synthetic nitrate of soda, produced at Hopewell, Va., by The Solvay Process Company.

THE N. F. A. GOLF TOURNAMENT

(Continued from page 14)

SATURDAY, JUNE 20th
Medal Play Handicap

Winner—A. Norman Into, International Minerals and Chemical Corp., Chicago, Ill.
Runner-up—J. E. Totman, Summers Fertilizer Company, Baltimore, Md.

Match Play vs. Par

Winner—E. M. Kolb, American Potash and Chemical Corporation, New York City.
Runner-up—David P. Tinley, International Minerals and Chemical Corp., Chicago, Ill.

Tombstone Handicap

Winner—C. S. Rauh, E. Rauh & Sons Fertilizer Company, Indianapolis, Ind.
Runner-up—A. McLintock, Texas Gulf Sulphur Company, New York City.

Kickers' Handicap

Winner—H. H. Kemp, Armour Fertilizer Works, Greensboro, N. C.
Runner-up—Reginald Grubb, Canadian Industries Ltd., Montreal, Canada.

Low Gross

Winner—H. R. Wemple, Texas Gulf Sulphur Company, New York City.
Runner-up—A. L. Walker, Jr., Texas Gulf Sulphur Company, New York City.

LADIES' EVENTS
Ladies Putting for Golfers

Winner—Mrs. William J. Murphy, New York City.
Runner-up—Mrs. Charles J. Brand, Washington, D. C.

Ladies Putting for Non-Golfers

Winner—Mrs. Albert B. Baker, New York City.
Runner-up—Mrs. J. W. Dean, Knoxville, Tenn.

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MAGNESIUM LIMESTONE
"It's a Dolomite"
American Limestone Company
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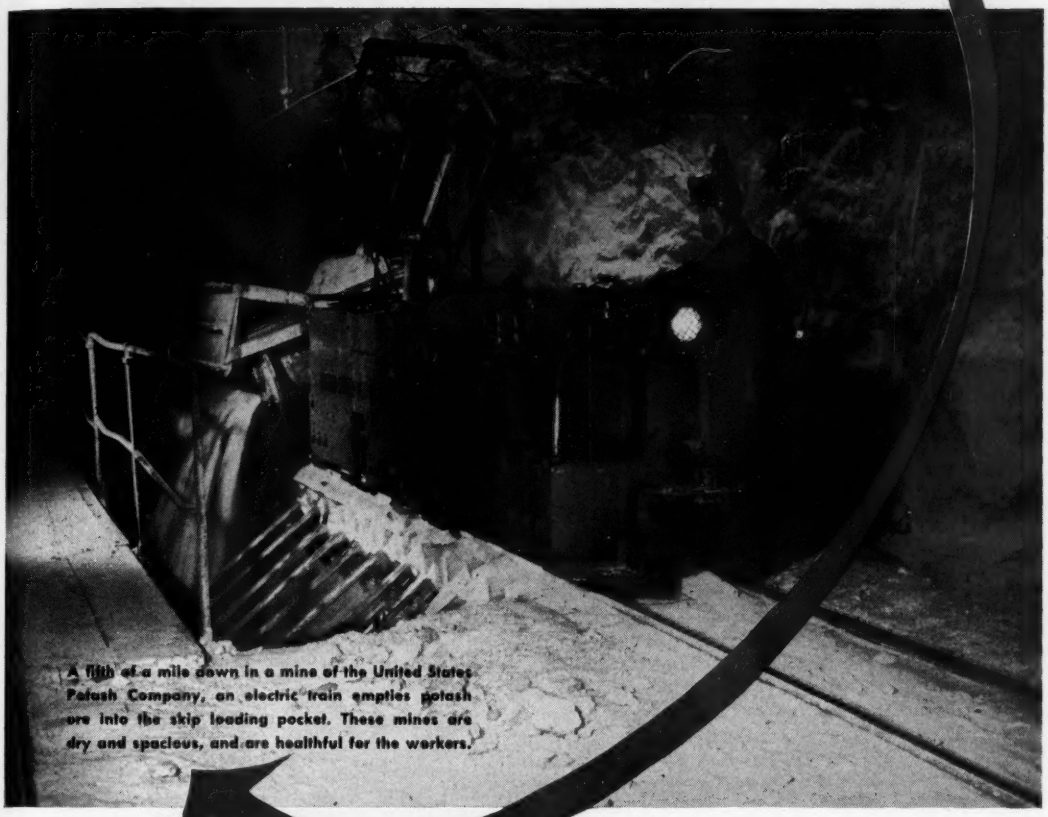
THIS PLANT FOOD IS MINED!



A fifth of a mile down in a mine of the United States Potash Company, an electric train empties potash ore into the skip loading pocket. These mines are dry and spacious, and are healthful for the workers.

● Vigor and health that bring about high yields for America's farms come from the depths of the potash mines. Refined and supplied to you as Higrade Muriate of Potash and other essential grades, this vital plant food is helping to produce finer fruits, vegetables, and other crops.

To the Nation's farmers, potash means strong, healthy plants, with greater resistance to disease and drought. To you, Sunshine State Potash means uniform quality and careful sizing, that make blending easy and accurate.

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SUNSHINE STATE POTASH — A PRODUCT OF NEW MEXICO U.S.A.

HIGRADE MURIATE OF POTASH 62/63% K_2O
Also 50% K_2O Grade

MANURE SALTS
22% K_2O Minimum

FERTILIZER INDUSTRY—FARM GROUP CONFERENCES

(Continued from page 12)

tained between mixed fertilizers and direct use. He stated that the Department of Agriculture is desirous of eliminating grades of mixed fertilizer and superphosphate that contain less than 18 units of plantfood, and superphosphate-potash mixtures that contain less than 20 units. The use of phosphate-potash mixtures on small grains and legumes will be given every encouragement by the Department. Plans are being made to encourage the use of surplus oil-seed meals in fertilizer mixtures.

F. W. Parker discussed the reason for grade reduction but stated that excellent progress has already been made through the cooperation of agronomists with the fertilizer industry. He emphasized that grade reduction will be a distinct contribution to the war program, since it usually results in raising the plantfood content of fertilizer, will provide a means for spreading nitrogen supplies, and, of course, will eliminate unnecessary and uneconomic grades. He outlined the procedure followed by the agronomists representing the Middle Atlantic States at the meeting held in Washington on June 5th.

Dr. Firman E. Bear, who served as chairman of the Middle Atlantic conference of agronomists, presented the recommendations as to ratios and grades, and mimeographed copies of these recommendations were used as the basis of the discussion that followed.

T. E. Milliman stated that as soon as possible a list of grades for each State will be prepared by the U. S. Department of Agriculture and recommended to the War Production Board.

At this point Charles J. Brand took the chair and called on P. H. Groggins, who stated that the Government agencies desire to cooperate with State officials and with the industry. He discussed the oil-meal situation briefly, also the need for more corn and cotton.

The agronomists representing the various States were requested to send to the U. S. Department of Agriculture the lists of grades recommended, with the least delay possible. It was understood, however, that no new ratios or grades would be added but that after consultation with their associates the agronomists might desire to change slightly the grades recommended for the State.

The problem of how to save nitrogen was then discussed at considerable length and during this discussion it was pointed out that we have on hand in this country, including the present crop, enough wheat to last for nearly 2½ years. In view of this situation, it was moved that nitrogen be omitted from mixed fertilizers for use on fall-seeded small grains in 1942. The motion was seconded and carried unanimously.

Middle Western Meeting

The fertilizer industry-farm group conference, which was held in Chicago on June 25th, was attended by more than 80 persons, including official representatives of Ohio, Indiana, Kentucky, Michigan, Illinois, Wisconsin, Minnesota, Iowa, and Missouri, and 63 representatives of the fertilizer industry. The Federal representatives were: P. H. Groggins, chief, Chemicals Division, OAWR; T. E. Milliman, chief, Agricultural Chemicals Unit, WPB; F. W. Parker, consultant, Fertilizers and Insecticides Division, OPA; William F. Watkins, Bureau of Agricultural Economics, USDA; and H. O. Wells, assistant director, North Central Region, AAA.

T. E. Milliman called the meeting to order and introduced P. H. Groggins as chairman for the day. Mr. Milliman ws the first speaker and reviewed the potash, phosphate, and nitrogen situations, emphasizing especially the shortage of nitrogen and the uncertainty as to future supplies of nitrate of soda.

W. F. Watkins spoke on crop goals and nitrogen needs, suggesting as a means of saving nitrogen the omission of nitrogen from mixed fertilizers for fall-sown grains, but emphasizing the use of even larger than normal quantities of phosphate-potash mixtures for small grains and legumes.

F. W. Parker stated that the Middle Western States will be affected less by grade reduction than most any other region because of the excellent work that has been done through cooperation between the Middle West agronomists and the industry over a period of 20 years. He stated that, through grade reduc-

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Cayce, S. C.
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Cincinnati, Ohio
Cleveland, Ohio
Detroit, Mich.
East Point, Ga.
East St. Louis, Ill.
Greensboro, N. C.
Havana, Cuba
Henderson, N. C.
Montgomery, Ala.
Norfolk, Va.
No. Weymouth, Mass.
Pensacola, Fla.
Pierce, Fla.
Port Hope, Ont., Can.
Presque Isle, Me.
Savannah, Ga.
Searsport, Maine
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Spartanburg, S. C.
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Greensboro, N. C.
Havana, Cuba
Henderson, N. C.
Houlton, Me.
Laurel, Miss.
Montgomery, Ala.
Montreal, Quebec, Can.
New York, N. Y.
Norfolk, Va.
No. Weymouth, Mass.
Pensacola, Fla.
Pierce, Fla.
Port Hope, Ont., Can
St. Paul, Minnesota
Savannah, Ga.
Spartanburg, S. C.
Wilmington, N. C.

tion, the industry can cooperate more fully with the War Production Board in handling the nitrogen shortage and with the U. S. Department of Agriculture in attaining crop goals.

Dr. C. E. Millar, who served as chairman of the grade conference of Mid-West agronomists held on June 12th, presented the recommendations of that conference, and after full discussion a list of ratios and grades was tentatively approved. The agronomists representing each State were asked to confer with their associates and report for each State a list of grades to the U. S. Department of Agriculture. Manufacturers representing Kentucky felt that the list for that State would need some further additions and they were asked to confer with proper officials at the University of Kentucky for that purpose.

It was the consensus of the meeting that when two grades of the same ratio vary only slightly, in concentration, as for example 0–12–12 and 0–14–14, only one of the pair should be offered by any one manufacturer.

The problem of saving nitrogen was discussed at considerable length, and in view of the large supply of wheat on hand it was moved that the meeting go on record in support of the recommendation of the Mid-West agronomists favoring the use of phosphate-potash mixtures and organic nitrogen only on fall-seeded small grains. This motion was passed unanimously.

THE PLACE OF THE FERTILIZER INDUSTRY IN THE WAR PROGRAM

(Continued from page 6)

reached as to the reason for certain orders that were issued and as to what might be done to assist in the accomplishment of desired results.

At the request of the U. S. Department of Agriculture, the War Production Board, and the Office of Price Administration, we have called meetings of agronomists for the purpose of recommending a reduced number of grades and the most economic grades to be sold during the next fertilizer year. Industry-farm group meetings will also be called for this same purpose, and agronomists, representatives of farm organizations, and all interested parties will be asked to attend.

At the request of WPB, OPA, and OAWR, the Association informs all members of the industry, whether members of the Association or not, of meetings of the Fertilizer Industry Advisory Committee and its subcommittees, and of any other vital matters affecting the industry as a whole. Such a meeting of the industry committee was held in Washington as recently as June 11th. At the request of one of these agencies, the Association has reproduced and mailed, within the day, to all fertilizer producers, a letter giving urgent and important information. Allocation and price ceiling orders have been reproduced and mailed the same day as published. To render such service we believe to be the Association's duty, and it is being performed cheerfully and quickly to the best of our ability.

Individually and collectively, the people of these United States are in this war to win it. Our industry is an important cog in the production machine, and whatever service is required will be rendered enthusiastically; whatever sacrifice—will be cheerfully accepted.

THE FERTILIZER INDUSTRY—GOVERNMENT HITCHUP

(Continued from page 11)

is being harvested, voted unanimously to recommend withholding the use of nitrogen on fall-sown grains in 1942. They went further by recommending that no mixed fertilizer containing nitrogen be made available to farmers for the balance of 1942 except for immediate use upon late planted vegetables. The two meetings of agronomists will be followed by meetings of the industry with the same agronomists in Philadelphia and Chicago on June 24th and 25th, where it is expected that the cooperation of the industry will equal that represented by the signal contribution to the war program by the agronomists of these 15 States.

During the next 30 days similar meetings will be held in all of the other fertilizer areas of the United States. From these meetings is expected to come lists of grades which reflect the expected nitrogen shortage but which nevertheless are adapted to the crops for which they will be recommended. Moreover, these grades are expected to reflect economy to the farmer in that they will carry little or no inert fillers and will in most cases be liberally fortified with adequate content of superphosphate and potash.

The USDA has been asked by the WPB and OPA to take the lead in assembling the grades State-by-State and region-by-region, and to undertake also their corollation and adaptation to crops, regions, and the general variations in soil types. Here it may be well to state that recognition is expected to be given to the greater need for nitrogen in the Atlantic and Gulf Coastal plain areas where soils are relatively deficient in organic matter

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Agricultural authorities have shown that a lack of Boron in the soil can result in deficiency diseases which seriously impair the yield and quality of crops.

When Boron deficiencies are found, follow the recommendations of local County Agents or State Experiment Stations.

Information and references available on request.

AMERICAN POTASH & CHEMICAL CORPORATION
70 PINE STREET, NEW YORK CITY
Pioneer Producers of Muriate of Potash in America
See Page 4

and where certain crops, particularly cotton and vegetables, require a higher nitrogen ratio. As soon as the lists are completed, which should be within 30 to 40 days, it is expected that the USDA will request the WPB to make them the official grades as a conservation or war measure.

In the work of the war agencies on fertilizer, The National Fertilizer Association has been of invaluable aid to the Government, the farmers, and the industry. Always ready to help, the personnel of the Association's office have contributed sound information, taken the lead in arranging meetings of manufacturers and agronomists, disseminated the findings to all in the business, and in every way have been understanding and constructive.

Grade Limitation

The second great contribution which the fertilizer industry can make to the war program, to farmers, and to itself is to support wholeheartedly the program on limitation of grades and virtual elimination of useless filler. Most of the fertilizer industry has desired to reduce the number of grades offered. The confusion and waste occasioned by the multiplicity of grades need not be mentioned here. The soundest agronomic and industrial opinion is that farmers and the industry will alike be served by standardization of grades to a very small number, State-by-State. It will be particularly helpful when fertilizer companies recognize the opportunity to educate country dealers and farmers to the fact that the oncoming very small list of grades should not be regarded merely as a war expedient but rather that a small list of economical grades should be looked upon as a permanent fixture, with a higher percentage of nitrogen to be made available after the war.

With some readjustment of grades in which nitrogen is conserved or, as in the case of wheat, eliminated in the areas of strong soils, there should be enough mixed fertilizer to take care of needs. The readjustment of nitrogen slightly downward for certain crops will not deprive those crops of much-needed superphosphate and potash. This is the procedure now under way as a means of avoiding the easily avoidable hardship of rationing fertilizers to the farmer. The farmer does not like rationing, as evidenced by recent experiences in gasoline and by the flareups now occurring on sugar in the regions where farm household canning of fruits is under way. The fertilizer industry has through the Fertilizer Industry Advisory Committee to Government expressed itself as being of the opinion that rationing of fertilizers is not necessary for the next season. The subcommittee of the general advisory committee worked long and faithfully in presenting a report to Government and to the industry committee in which this opinion was voiced. More particularly the industry advisory committee and subcommittee have on behalf of the fertilizer business as a whole stated that Government may depend upon the fertilizer manufacturers, their dealers, and agents to carry out faithfully the distribution of fertilizers upon Federal and State recommendations as to grades, crops, and regions.

In the war agencies are several experienced fertilizer men who have devoted most of their working lives to the production and distribution of fertilizer. I refer particularly to men like George Cushman and Frank Parker of OPA; H. H. Meyers, George McCarty, and myself of WPB. It is the opinion of these men that the generally plentiful supply of fertilizer, with nitrogen alone being somewhat short, is a situation that does not at the present time warrant the enormous job of rationing to the farmer.

Industry to Handle Industry

Recently at a meeting of all of the large cooperatives held in Chicago, a meeting which incidentally I did not attend or influence, the cooperatives of the United States that handle fertilizer unanimously went on record as requesting that the distribution of nitrogen and fertilizers be left with the industry. The cooperative men declared themselves as being ready to carry out Federal and State recommendations as to grades, areas, quantities for certain crops, etc.

The Fertilizer Industry Advisory Committee has rendered yeoman service to the Government and to farmers during this war period. It is a committee of earnest, public-minded men. I desire here, on behalf of the Government, to commend the committee for their willingness to give their time and substance to serve the common cause of agriculture and industry. The committee is composed of the following:

For Nitrogen—S. B. Haskell, New York, N. Y.; J. A. Woods, New York, N. Y.
For Phosphate Rock—John T. Burrows, Chicago, Ill.
For Sulphuric Acid—L. H. Carter, New York, N. Y.
For Superphosphate—C. F. Hockley, Baltimore, Md.
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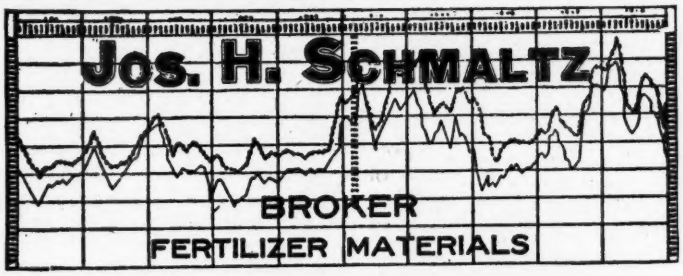

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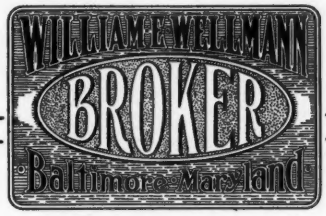

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For the Pacific Coast—Weller Noble, Berkeley, Calif.
For the Cooperatives—M. H. Lockwood, Springfield, Mass.; M. K. Derrick, Indianapolis, Ind.
Ex-Officio—Charles J. Brand, Washington, D. C.

In closing, let me say a word about new business. The fertilizer industry was always a hound for new business. It should be the same now and in the future, but the kind of new business is different. The new business that a fertilizer company should look after during the next year is the volume that comes, not from swiping another man's customer, but rather the new business for 1943 should be secured by taking care of those farmers whose regular sources of supply are cut off because the local dealer has gone out of business or is unable to obtain sufficient goods. The other kind of new business to obtain, and it is considerable, is to supply the old customers with increased requirements of fertilizer of the proper ratio and grade to feed the crops this country calls upon them to produce for the war struggle.

OUR ASSOCIATION—A BRIEF REPORT

(Continued from page 9)

it has been reported that the OPA is contemplating the employment of some 70 cost accountants to make a cost study of the 700 or 800 firms in our industry. There may be some encouragement in the fact that the two cost accounting manuals of our industry and the two digests prepared in connection with the NRA code are likely to be used in this far-reaching study.

Transportation in our industry represents on the average about 20 per cent of the delivered cost of the commodity. Savings in this field mean savings to the farmer as well as to the fertilizer manufacturer as ours is a highly competitive industry. Through the coordinated work of our Traffic Committee, our staff, and our commerce counsel, millions of dollars of transportation expense have been saved. Taking only four specific cases, the situation can be shown quite convincingly:

CFA rate cases	$360,000
Inter-territorial rate case	264,000
Phosphate rock case	276,950
Bone case	92,000
	$992,950

These savings are real because they represent an actual reduction in rates in the CFA case and, in the other three, the prevention of increases going into effect for which tariffs already had been filed.

A final illustration is our work in helping to bring about greater *diversification in the use of fertilizer*. In 1928 five crops—cotton, corn, wheat, potatoes, and tobacco—accounted for 81 per cent of all fertilizer used, whereas in 1938 these crops used only 67 per cent of the total. This shift was especially pronounced in the cotton belt. In 1928, nine cotton-fertilizer States (North Carolina, South Carolina, Georgia, Alabama, Tennessee, Mississippi, Arkansas, Louisiana, and Texas) used 4,600,800 tons of fertilizer and 2,125,960 tons of cotton, or 46 per cent. In 1941 these same States used 4,226,400 tons of fertilizer, 1,522,000 on cotton, or only 36 per cent. There was a loss of 603,690 tons on cotton and a gain of 229,530 tons on the other crops. We believe that by encouraging the fertilizing of pastures, legumes, corn, small grains, and forage crops all the tonnage lost on cotton can be regained and more besides.

Cost of Our Work

The average yearly expenditure for all of the work that you have approved since 1925 has been $185,619. The highest expenditure in any one year was in 1934–35, $276,735, during the NRA code. The lowest was in 1932–33, $58,312, during the depth of the depression. During the year just closed we shall have spent approximately $174,000, of which approximately $59,000 is for Soil Improvement Work. The annual average spent for Soil Improvement is 37 per cent of the budget.

For the past year no item was set up in the budget to cover antitrust case expenses. The Board instructed the Executive Secretary to put into effect such economies as would provide for the largest possible part of the cost. I am glad to report that we have been able to meet the fine of $9,000, special counsel's fee of $7,500, and additional miscellaneous expenses, making up a total of $17,325 in direct expense, from the year's income and without calling upon surplus. This result was due largely to leaving unfilled, positions provided in the budget, and in part to income somewhat greater than had been estimated at the beginning of the year.

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the number of pounds of raw material for a desired per cent. of plant food in a ton of mixed goods—or find what per cent. of a certain plant food in a ton of fertilizer produced by a specific quantity of raw materials.

No mathematical calculations are necessary. You can find the figures in a few seconds with the aid of

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How much sulphate of ammonia, containing 20 per cent. of nitrogen, would be needed to give 4½ per cent. nitrogen in the finished product?

Seven hundred and fifty pounds of tankage, containing 8 per cent. phosphoric acid are being used in a mixture. What per cent. of phosphoric acid will this supply in the finished goods?

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For Alphabetical List of Advertisers, see page 33.

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Charlotte Chem. Laboratories, Inc., Charlotte, N. C.
Chemical Construction Corp., New York City.

ACID EGGS
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AMMONIA LIQUOR
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Chemical Construction Corp., New York City.

AMMONIATING EQUIPMENT
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BAGS—Paper
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Schmaltz, Jos. H., Chicago, Ill.
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Hayward Company, The, New York City.
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BURNERS—Sulphur
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BURNERS—Oil
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CARS—For Moving Materials
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CARTS—Fertilizer, Standard and Roller Bearing
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Charlotte Chem. Laboratories, Inc., Charlotte, N. C.
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Farmers Fertilizer Company, Columbus, Ohio.
International Minerals and Chemical Corporation, Chicago, Ill.
Phosphate Mining Co., The, New York City.
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Sackett & Sons Co., The A. J., Baltimore, Md.
Stedman's Foundry and Mach. Works, Aurora, Ind.

GARBAGE TANKAGE
Wellmann, William E., Baltimore, Md.

GEARS—Machine Moulded and Cut
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Stedman's Foundry and Mach. Works, Aurora, Ind.

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Sackett & Sons Co., The A. J., Baltimore, Md.

GELATINE AND GLUE
American Agricultural Chemical Co., New York City.

GUANO
Baker & Bro., H. J., New York City.

HOISTS—Electric, Floor and Cage Operated, Portable
Hayward Company, The, New York City.

HOPPERS
Atlanta Utility Works, East Point, Ga.
Link-Belt Company, Philadelphia, Chicago.
Sackett & Sons Co., The A. J., Baltimore, Md.
Stedman's Foundry and Mach. Works, Aurora, Ind.

IMPORTERS, EXPORTERS
Armour Fertilizer Works, Atlanta, Ga.
Ashcraft-Wilkinson Co., Atlanta, Ga.
Baker & Bro., H. J., New York City.
Bradley & Baker, New York City.
Wellmann, William E., Baltimore, Md.

IRON SULPHATE
Tennessee Corporation, Atlanta, Ga.

INSECTICIDES
American Agricultural Chemical Co., New York City.

LACING—Belt
Sackett & Sons Co., The A. J., Baltimore, Md.

LIMESTONE
American Agricultural Chemical Co., New York City.
American Limestone Co., Knoxville, Tenn.
Ashcraft-Wilkinson Co., Atlanta, Ga.
Baker & Bro., H. J., New York City.
Bradley & Baker, New York City.
McIver & Son, Alex. M., Charleston, S. C.
Wellmann, William E., Baltimore, Md.

LOADERS—Car and Wagon, for Fertilizers
Link-Belt Company, Philadelphia, Chicago.
Sackett & Sons Co., The A. J., Baltimore, Md.

MACHINERY—Acid Making
Atlanta Utility Works, East Point, Ga.
Charlotte Chem. Laboratories, Inc., Charlotte, N. C.
Chemical Construction Corp., New York City.
Duriron Co., Inc., The, Dayton, Ohio.
Fairlie, Andrew M., Atlanta, Ga.
Monarch Mfg. Works, Inc., Philadelphia, Pa.
Sackett & Sons Co., The A. J., Baltimore, Md.
Stedman's Foundry and Mach. Works, Aurora, Ind.

MACHINERY—Coal and Ash Handling
Hayward Company, The, New York City.
Link-Belt Company, Philadelphia, Chicago.
Sackett & Sons Co., The A. J., Baltimore, Md.

MACHINERY—Elevating and Conveying
Atlanta Utility Works, East Point, Ga.
Hayward Company, The, New York City.
Link-Belt Company, Philadelphia, Chicago.
Sackett & Sons Co., The A. J., Baltimore, Md.
Stedman's Foundry and Mach. Works, Aurora, Ind.

MACHINERY—Grinding and Pulverizing
Atlanta Utility Works, East Point, Ga.
Sackett & Sons Co., The A. J., Baltimore, Md.
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MANGANESE SULPHATE
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MIXERS
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Stedman's Foundry and Mach. Works, Aurora, Ind.

NITRATE OF SODA
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Armour Fertilizer Works, Atlanta, Ga.
Ashcraft-Wilkinson Co., Atlanta, Ga.
Baker & Bro., H. J., New York City.
Barrett Division, The, Allied Chemical & Dye Corp., New York City.
Bradley & Baker, New York City.
Chilean Nitrate Sales Corp., New York City.
Huber & Company, New York City.
International Minerals & Chemical Corporation, Chicago, Ill.
McIver & Son, Alex. M., Charleston, S. C.
Schmaltz, Jos. H., Chicago, Ill.
Wellmann, William E., Baltimore, Md.

NITRATE OVENS AND APPARATUS
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NITROGEN SOLUTIONS
Barrett Division, The, Allied Chemical & Dye Corp., New York City.

NITROGENOUS ORGANIC MATERIAL
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Armour Fertilizer Works, Atlanta, Ga.
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Baker & Bro., H. J., New York City.
Bradley & Baker, New York City.
DuPont de Nemours & Co., Wilmington, Del.
Huber & Company, New York City.
International Minerals & Chemical Corporation, Chicago, Ill.
McIver & Son, Alex. M., Charleston, S. C.
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NOZZLES—Spray
Monarch Mfg. Works, Philadelphia, Pa.

PACKING—For Acid Towers
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Chemical Construction Corp., New York City.

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Schmaltz, Jos. H., Chicago, Ill.
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Wellmann, William E., Baltimore, Md.

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PIPES—Wooden
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Sackett & Sons Co., The A. J., Baltimore, Md.

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Armour Fertilizer Works, Atlanta, Ga.
Ashcraft-Wilkinson Co., Atlanta, Ga.
Baker & Bro., H. J., New York City.
Bradley & Baker, New York City.
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International Minerals & Chemical Corporation, Chicago, Ill.
Jett, Joseph C., Norfolk, Va.
Schmaltz, Jos. H., Chicago, Ill.
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Potash Co. of America, New York City.
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Duriron Co., Inc., The, Dayton, Ohio.
Monarch Mfg. Works, Inc., Philadelphia, Pa.

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Baker & Bro., New York City.
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Armour Fertilizer Works, Atlanta, Ga.
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UREA
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UREA-AMMONIA LIQUOR
DuPont de Nemours & Co., E. I., Wilmington, Del.

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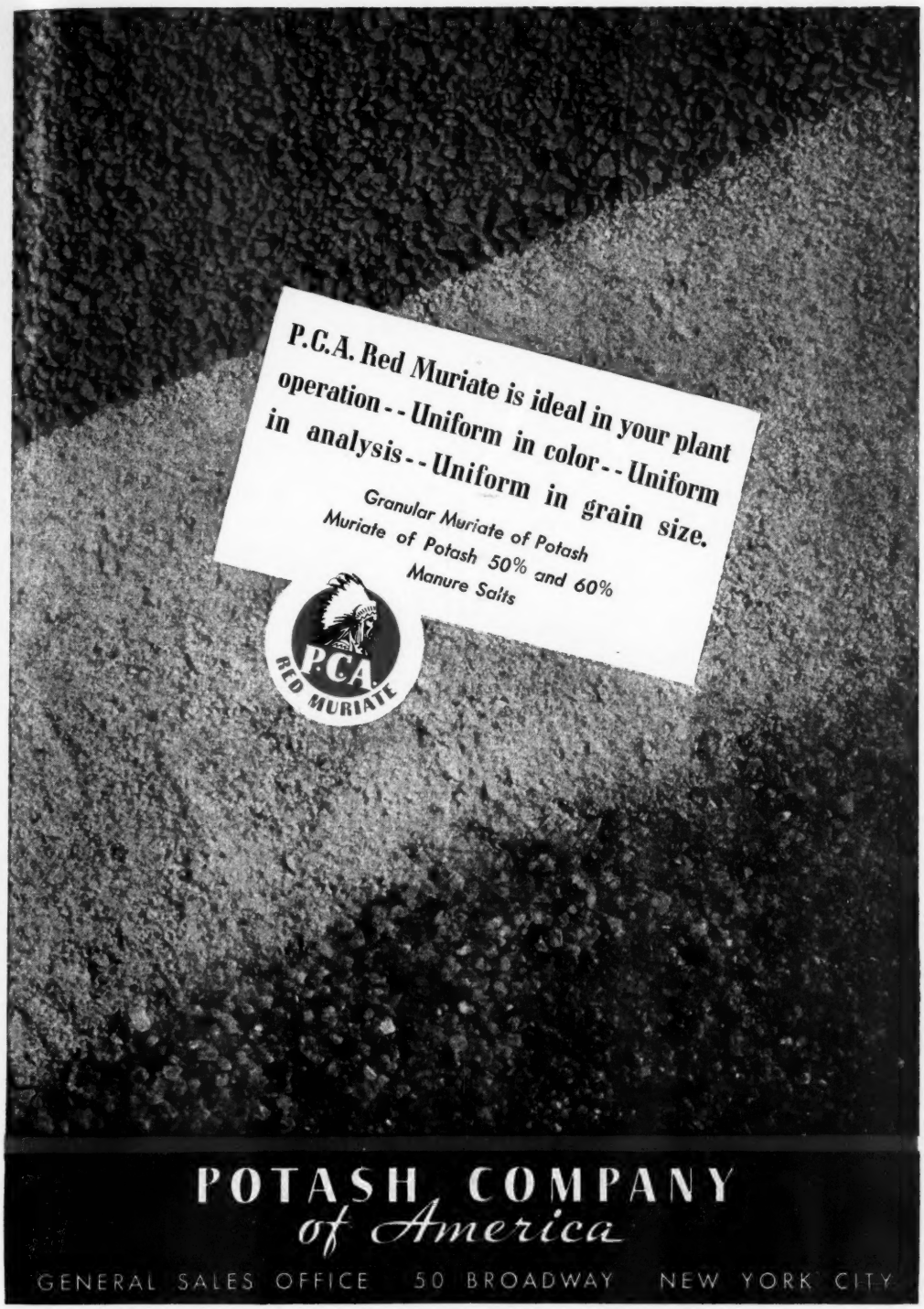
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